

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/067899 A3

(51) International Patent Classification⁷: A61K 31/145, A61P 37/00, 43/00

(21) International Application Number:
PCT/IB2005/000745

(22) International Filing Date: 13 January 2005 (13.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/536,016 13 January 2004 (13.01.2004) US
60/599,331 5 August 2004 (05.08.2004) US

(71) Applicant (for all designated States except US): OMEGA BIO-PHARMA (I.P.2) LIMITED [—/CN]; Unit 714, Mirarmar Tower, 1-23 Kimberley Road, Tsim Sha Tsui, Kowloon, Hong-Kong (CN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CHI, Francis [PG/CN]; Flat D, 11/F, Tower 10, Beverly Villas, 16 La Salle Road, Kowloon, Hong Kong (CN). XU, Jinxian [CN/CN]; T33-603, N°916 Bo Xing Road, Pudong, Shanghai (CN). WONG, Gary, Kwan, Po [—/CN]; Rm 1032 Nam Wai House, Nam Shan Estate, Kowloon (CN).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report: 16 February 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/067899 A3

(54) Title: METHODS FOR TREATING STRESS AND AFFECTING BIOLOGICAL IMMUNE SYSTEMS USING A CYSTEAMINE COMPOUND

(57) Abstract: The subject invention provides materials and methods for treating stress and/or augmenting immune response. More specifically, the present invention provides methods for the treatment and/or prevention of stress-related physiological responses; the alleviation of stress-related symptoms; as well as the prevention or delay in development of stress-related complications. The present invention further provides biologically-active compounds that can cause the thymus and spleen to increase in size and, cause an increase in villi length and goblet cell production in mucosae. Specifically exemplified herein is the use of a cysteamine compound to modulate immune responsiveness and/or treat stress.